Birth Defects Profile in Michigan Prosperity Region 10

(Macomb, Oakland, and Wayne counties)



By law, hospitals and medical labs report certain health conditions affecting children at birth or up to 2 years of age.

Michigan Birth Defects Registry (MBDR)

- MBDR information is confidential. It is used to:
 - Calculate baseline rates.
 - ❖ Analyze trends.
 - Identify and respond to public health concerns.
- MBDR data helps us understand health and development needs, identify causes, and share prevention strategies.

Birth Defects in Region 10 (2013-2019)

- ❖ An average of 45,818 infants born in Region 10 each year.
- Approximately 8,272 of these infants were born with a birth defect
- Hypospadias and Trisomy 21 were the most prevalent birth defects in Michigan and Prosperity Region 10 (Table 1).
- The prevalence of all birth defects was similar between Prosperity Region 10 and Michigan as a whole.



Table 1. Prevalence of Selected Birth Defects within Prosperity Region 10 and the State of Michigan, 2013-2019

	Prosperity Region 10		Michigan	
Birth Defect	Number of Cases	Prevalence (per 10,000 live births)	Number of Cases	Prevalence (per 10,000 live births)
Anencephaly	16	0.5	69	0.9
Cleft Lip with Cleft Palate	197	6.1	517	6.6
Cleft Lip without Cleft Palate	89	2.8	264	3.4
Cleft Palate without Cleft Lip	202	6.3	541	6.9
Gastroschisis	90	2.8	321	4.1
Hypoplastic Left Heart Syndrome	111	3.5	308	3.9
Hypospadias	1352	42.2	3052	39.0
Limb Deficiencies	124	3.9	308	3.9
Spina Bifida	135	4.2	326	4.2
Tetralogy of Fallot	162	5.1	406	5.2
Transposition of the Great Arteries	104	3.2	298	3.8
Trisomy 21	400	12.5	1010	12.9
Total Number of Live Births	320,728		782,227	

MBDR Data Limitations and Cautions

- Data are based on passive reporting, which means MBDR relies on facilities to identify and report cases of birth defects. Getting all facilities to report complete and timely data can be a challenge.
- Some facilities report children with a birth defect that is later "ruled out" resulting in an overcount of the actual number of
 cases.
- Children diagnosed and treated in facilities in other states may be missed, which will significantly affect the completeness of data for Michigan's border counties.

Birth Characteristics among all Mothers and Babies

Between 2013 and 2019, roughly 45,818 babies were born in Prosperity Region 10 each year.

During an average year in Prosperity Region 10:

Mother's Race and Ethnicity

- 25,210, or 55 percent of, infants were born to white, non-Hispanic mothers.
- ❖ 14,070, or 31 percent of, infants were born to Black, non-Hispanic mothers.
- 3,800, or 8 percent of, infants were born to all other non-Hispanic mothers.
- 2,750, or 6 percent of, infants were born to Hispanic mothers.

Mom's Socioeconomic and Educational Status

- 19,170, or 42 percent of, all births reported Medicaid as the intended payer.
- ❖ 5,450, or 12 percent of, infants were born to mothers with less than a high school education.
- ❖ 10,930, or 24 percent of, infants were born to mothers who had a high school education.
- 14,380, or 31 percent of, infants were born to mothers who had some college or an associate degree.
- ❖ 14,480, or 32 percent of, infants were born to mothers who had a college degree.

Data source: Michigan resident live birth files, MDHHS, Division of Vital Records and Health Statistics, 2013-2019.





Mom's Age

- ❖ 2,170, or 5 percent of, infants were born to teenage mothers (15 to 19 years).
- **❖ 36,000**, or **79 percent** of, infants were born to mothers **20 to 34 years of age**.
- ❖ 7,600, or 17 percent, of infants were born to mothers 35 years of age or older.

Mom and Baby Health Before, During, and After Pregnancy

- 23,220, or 51 percent of, infants were born to mothers who were overweight or obese.
- 5,590, or 12 percent of, infants were born to mothers who used tobacco during pregnancy.
- 6,230, or 14 percent of, infants were born prematurely.
- ❖ 4,430, or 10 percent of, infants were born at a low birth weight.
- ❖ 380, or less than 1 percent of, infants were born to mothers who had prepregnancy diabetes type 1 or type 2.



